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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,967	08/26/2003	Lawrence G. Rodriguez	5801-03/B & D0003.US	2849

7590

07/06/2006

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EXAMINER
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BOSWELL, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/647,967	<b>Applicant(s)</b> RODRIGUEZ ET AL.	
	<b>Examiner</b> Christopher Boswell	<b>Art Unit</b> 3676	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/2/06.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-10 and 12-16 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Number 6,925,844 to Liu.

Liu discloses a lockset having a lock mechanism (100) including an actuator (110) having an aperture (112 and 114), an operator (102), and a turn button (200) mounted in the operator, the turn button having a head portion (220), and a shaft (230) having a leading helical end tip (236), and means for self-alignment (column 7, lines 19-24) of the shaft with the aperture of the lock mechanism as the shaft is inserted into the aperture, as in claims 1, 4, and 7.

Liu also discloses the leading helical portion having a plurality of leading helical surfaces (figure 3) that taper and twist from a transition line of the shaft toward an end of the shaft, as in claims 2, 5, and 9, as well as the plurality of helical surfaces smoothly transition between adjacent helical surfaces (smooth angle between the adjoining sides of the helical surfaces; figure 5), as in claims 3, 6, and 10, wherein once the leading helical end portion engages the aperture, a rotation of the turn-button effects a corresponding rotation of the rotatable actuator of the lock mechanism (column 7, lines 53-58), as in claim 8.

Liu further discloses a rotation of the turn-button effects a corresponding rotation of the aperture of the lock mechanism (column 7, lines 53-58), as in claims 12 and 13, as well as the aperture of the lock mechanism has a substantially rectangular shape (elements 112 and 114 are substantially rectangular), as in claims 13 and 15, wherein a number of the plurality of leading helical surfaces is greater than two (at least 3 helical surfaces; figure 5), as in claims 14 and 16.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu, as applied above, in view of U.S. Patent Number 842,834 to Hurdle.

Liu discloses the invention substantially as claimed. Liu discloses a lock cylinder that has a helical keyway that is container within a lock shell. However, Liu does not explicitly disclose the exact environment the lock shell would be employed. Hurdle teaches of a locking assembly having a helical keyway inside of an operator, where the operator is a doorknob (r), in the same field of endeavor for the purpose of providing a compact lock, which cannot be picked and may be attached to a lock having a knob mounted on an actuation spindle (page 1, lines 14-21). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the locking assembly of Liu into a door knob, as taught by Hurdle, where the shaft of the turn-button would extend from the head portion through the door knob to

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engage the aperture of the lock mechanism in order to provide a compact lock which cannot be picked and may be attached to a lock having a knob mounted on an actuation spindle.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to locking assemblies with helical actuation elements:

U.S. Patent Number 616,751 to Vedeer et al., U.S. Patent Application Publication Number 2004/0172992 to Huang.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (571) 272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher Boswell  
Examiner  
Art Unit 3676

CJB   
June 29, 2006